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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,788	02/18/2004	Takahiro Goto	Q79792	9845
23373	7590	03/21/2005	EXAMINER	
SUGHRUE MION, PLLC			GILLIAM, BARBARA LEE	
2100 PENNSYLVANIA AVENUE, N.W.			ART UNIT	
SUITE 800			PAPER NUMBER	
WASHINGTON, DC 20037			1752	

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/779,788	GOTO, TAKAHIRO	
	Examiner	Art Unit	
	Barbara L. Gilliam	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-19 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/19/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claims

2. Claims 1-19 are present.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoshima et al. (EP 1 235 107 A1) in view of Maerz et al. (US 6,165,685).

- a. In EP 1 235 107 A1, Aoshima et al. teach a photopolymerization composition that is cured with visible light or an infrared laser and is used as a recording layer in a negative planographic printing plate precursor. The composition comprises a polymerizable compound having at least one radical-polymerizable ethylenically unsaturated double bond, a radical polymerization initiator, a binder polymer and a compound generating heat by infrared exposure (abstract). The polymerization initiator is added in an amount of 0.1 to 50% and when exposure is

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conducted with infrared light, an onium salt is preferred ([0023]-[0033]). According to the teachings of Aoshima et al, it is preferable to select a linear organic polymer as the binder, which can be dissolved or swollen with water or an alkaline solution to enable development with water or an alkaline solution ([0035]). Urethane-based binder polymers containing an acid group can also be used ([0037]) and the weight average molecular weight is preferably 5, 000 or more ([0039]). The binder polymer can be used either singly or in combination ([0041]). The compound generating heat by infrared exposure can be a dye or pigment such as the preferable cyanine dye and black pigments ([0043]-[0052]). An intermediate adhesion promoting layer can be provided between the support and the composition layer ([0076]) and an oxygen blocking protective layer can further be disposed on the photopolymerization composition layer ([0013]).

b. There is no suggestion in the teachings of Aoshima et al. of providing a UV absorbing compound in the protective layer of Aoshima et al. However based on the teachings of Maerz et al., it would have been obvious. Specifically the top layer of Maerz et al. is opaque to white light but transparent to radiation in the IR range and comprises at least one component which absorbs radiation in the UV/VIS range from 300 to 500 nm (abstract; column 2, lines 37-56) which allows the use of materials in the recording layer which are sensitive to both the UV/VIS and IR ranges (column 1, lines 28-43) such as black pigments (column 3, line 33 – column 4, lines 15). Therefore it would have been obvious to one of ordinary skill in the art to incorporate a compound having an absorption in the UV/VIS wavelength range in the protective layer of Aoshima et al. with reasonable expectation of preventing the photopolymerization composition layer from being inadvertently imaged under white light based on the teachings of Maerz et al.

5. Claims 1-2, 5-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugasaki et al. (US 2004/0131971 A1) in view of Maerz et al. (US 6,165,685).

a. In US 2004/0131971 A1, Sugasaki et al. teach a planographic printing plate precursor comprising a support and an image recording layer comprising a polymerizable compound, a binder polymer, a polymerization initiator and an IR absorber (abstract) wherein an example of the binder polymer is a linear organic high polymer having a structural unit represented by formula (I) having an acid value of 2.00 to 3.60 ([0030]-[0054]; [0059]), the polymerization initiator can be an onium salt and is used in an amount of 0.1 to 50% by weight ([0084]-[0089]; [0093]) and the IR absorber is a dye or pigment having a maximum absorbance in a range of 760 nm to 1200 nm including the preferred cyanine dyes and pigments having a particle size in the range of 0.01 to 10 μm ([0095]-[0108]). An intermediate layer can be provided between the support and the image recording layer to improve adhesion ([0189]-[0190]) and a protective layer can be provided on the image recording layer to prevent inhibition of the image forming reaction ([0191]-[0192]).

b. There is no suggestion in the teachings of Sugasaki et al. of providing a UV absorbing compound in the protective layer taught therein. However based on the teachings of Maerz et al., it would have been obvious. Specifically the top layer of Maerz et al. is opaque to white light but transparent to radiation in the IR range and comprises at least once component which absorbs radiation in the UV/VIS range from 300 to 500 nm (abstract; column 2, lines 37-56) which allows the use of materials in the recording layer which are sensitive to both the UV/VIS and IR ranges (column 1, lines 28-43) such

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as black pigments (column 3, line 33 – column 4, lines 15). Therefore it would have been obvious to one of ordinary skill in the art to incorporate a compound having an absorption in the UV/VIS wavelength range in the protective layer of Sugasaki et al. with reasonable expectation of preventing the image forming layer from being inadvertently imaged under white light based on the teachings of Maerz et al.

Allowable Subject Matter

6. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: Aoshima et al. (EP 1 235 107 A1) clearly teach more than one binder polymer can be incorporated in the photopolymerization composition layer and examples of the binder polymer include compounds with carboxylic acid groups ([0034]-[0041]). However, there is no teaching or suggestion in Aoshima et al. to specifically incorporate the carboxylic containing compounds required in present claim 4.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. In US 2004/0157153 A1, Takamuki teach an image formation method of planographic printing plate material.

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b. In US 6,838,222 B2, Aoshima et al. teach a photopolymerizable composition.

c. In US 5,879,861, Van Damme et al. teach a method for making a lithographic printing plate.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara L. Gilliam whose telephone number is 571-272-1330. The examiner can normally be reached on Monday through Thursday, 8:00 AM - 5:30 PM.

a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

b. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Barbara L. Gilliam

Barbara L. Gilliam
Primary Examiner
Art Unit 1752

bg
March 15, 2005